



**LEAN SIX SIGMA
WHITE BELT**

NOVEMBER 8, 2017

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A METHOD TO IMPROVE

What is **Lean Six Sigma** ?



Lean Six Sigma is a process improvement methodology focused on:

- Reducing waste/increasing speed (Lean)
- Reducing variation/increasing quality (Six Sigma)

BELT LEVELS

- Black Belt
- Green Belt
- Yellow Belt
- **White Belt**



White Belts Understand:

1. Basic LSS Terminology
2. Identify process issues
3. LSS Concepts

BASIC LSS CONCEPTS

Everything we do is a process.

Always focus on the customer and where value is added

All processes have variation and waste – no process is perfect!

All variation, defects, and waste have a cause

Known causes can be eliminated, reduced or controlled.

View improvements in a systemic way



Challenge: Round 1



RULES

1. You are one big team
2. Ball must have air-time
3. No ball to your direct neighbor
4. Start Point = End Point
5. Iteration = 2 min

THE 5 LEAN PRINCIPLES

Voice of Customer (VOC): The process of capturing customer expectations, preferences and aversions through reactive (i.e. complaints, returns, service calls) and proactive (i.e. interviews, surveys, focus groups) feedback channels.

Perfection: Iterative and continuous nature of process improvement

Value Stream Map (VSM): Lean-management method of mapping a process in order to promote awareness of the current state and to identify possible improvement opportunities

Push vs Pull: Pushing out products/services before there is an established demand versus production upon customer demand.

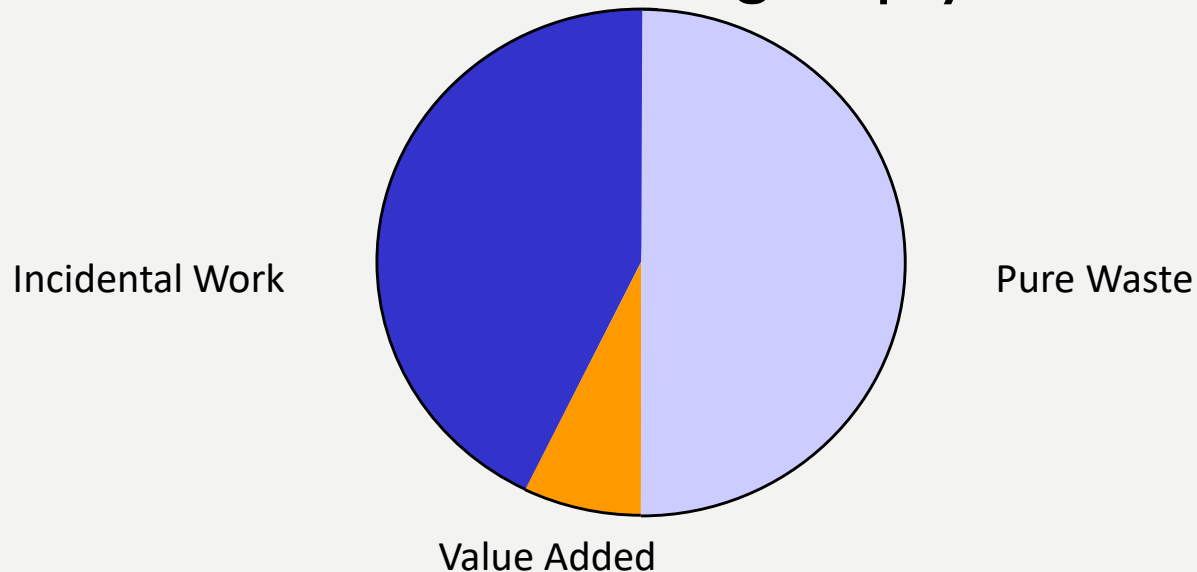
Continuous Flow: The optimal flow of value-add steps within a process (i.e. no stopping, one in-one out)

DMAIC MODEL



VALUE ADDED DEFINED

- The activity physically changes the product (or adds important information).
- The activity must be done right the first time (must not be rework).
- The customer must be willing to pay for it.



Challenge: Round 2



RULES

1. Recap Round 1 Rules
2. As a group, decide which two improvements will have the most impact on the process

8 WASTES: DOWNTIME



Defects

Efforts caused by rework, scrap, and incorrect information.



Overproduction

Production that is more than needed or before it is needed.



Waiting

Wasted time waiting for the next step in a process.



Non-Utilized Talent

Underutilizing people's talents, skills, & knowledge.



Transportation

Unnecessary movements of products & materials.



Inventory

Excess products and materials not being processed.



Motion

Unnecessary movements by people (e.g., walking).



Extra-Processing

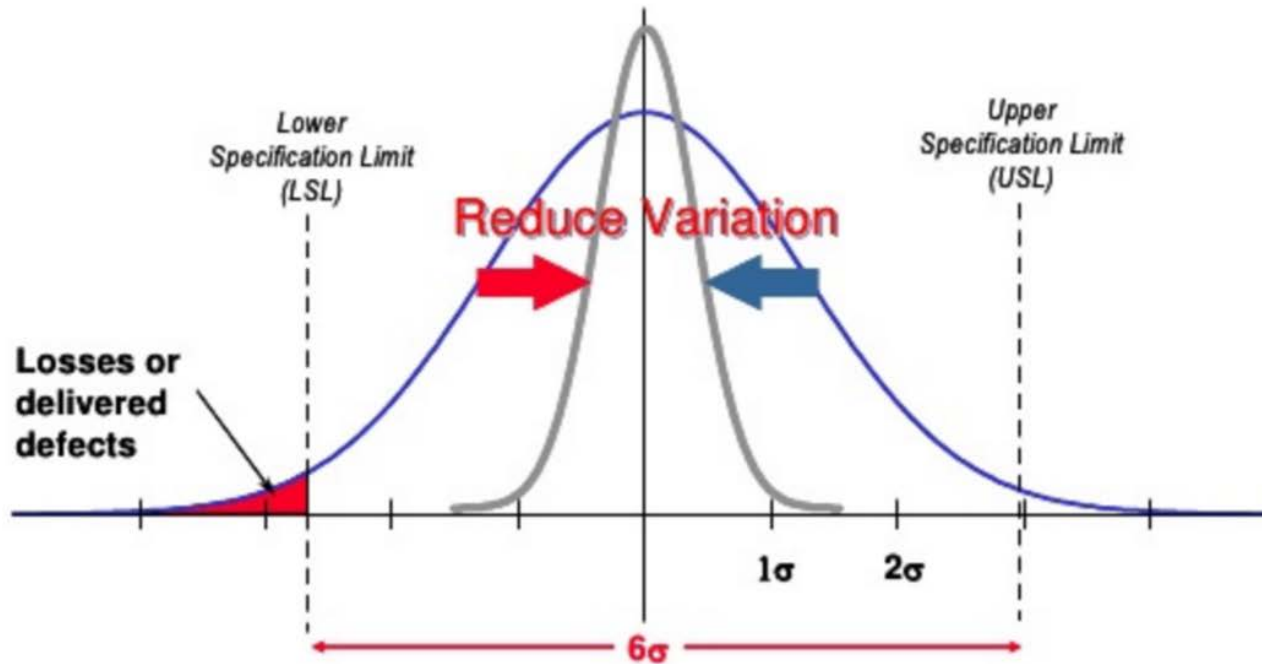
More work or higher quality than is required by the customer.

Once Waste Is Identified

- What do you do?
- How can you:
 - Eliminate?
 - Simplify?
 - Streamline?
 - Minimize?



SIX SIGMA: MEASURING PROCESS CAPABILITY



To achieve Six Sigma, the process variation must fit into the customer specification limits 99.9997% of the time.

CHALLENGE: ROUND 3



RULES

1. You are one big team
2. Ball must have air-time
3. No ball to your direct neighbor
4. Start Point = End Point
5. Iteration = 2 min

TRADITIONAL APPLICATIONS VS. HIGHER ED

Traditional Applications

Improved delivery of manufactured products

Increased capacity of expensive equipment

Improved safety

Better inventory record accuracy

Quality Improvement

Productivity Improvement

Improved report delivery time and accuracy

Faster delivery/approval process

Higher Ed Applications

Reduce contract processing cycle time

Reduce systems downtime

Improve safety compliance

Improve processes for tracking, measuring and billing

Improve customer satisfaction

Reduce delivery time for lab paperwork

Improve turn-around time for facility reports

Improve onboarding process

THANK YOU!

PLEASE STAY INVOLVED!

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